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VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			EXAMINER KRUER, STEFAN	
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			3654	

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/822,554

Applicant(s)

MOLNAR ET AL.

Examiner

Stefan Krueer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 17 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 - 16, 20, 25, 46 - 47 is/are allowed.
- 6) ☒ Claim(s) 1 - 9, 17 - 19, 21- 24, 26 - 45 is/are rejected.
- 7) ☒ Claim(s) 1, 10, 19, 30 and 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

**Claims 1, 10, 19, 30 and 31** are objected to because of the following informalities:

- **Claim 10**, slidable should be written as slidably.
- **Claim 30**, "one" is written twice.
- **Claim 31**, "a" in "said a means" is improper.

Furthermore, **Claims 1, 10 and 19** recites the limitation "said" as follows:

- Claims 1 and 19, "said seat support post".
- Claim 10, "said upper surface" and "said track retaining profile"

There is insufficient antecedent basis for these limitations in the claims. Appropriate correction is required.

**Claims 17 and 31 – 33** are objected to because of the following:

- **Claim 17**, the entirety of the claim is not supported by the specification and therefore lacks antecedent basis. It is therefore disregarded for purpose of this prosecution of this case.
- **Claims 31 – 33**, the subject "moveable cam" is neither depicted in the drawings nor stated/described in the specification. A lever arm (137) of the instant invention, defined as a "...simple seat lock actuator..." with which "...the seat lock mechanism can be disengaged..." is revealed. For purpose of prosecuting this application, the term "moveable cam" will be interpreted as the simple seat lock actuator, depicted as lever arm 137.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 16 and 17** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

**Regarding Claim 16**, the clamping element is neither adequately described nor depicted and therefore lacks enablement.

**Regarding Claim 17**, neither the aforementioned clamping element nor the construction of the teeth, in particular the end portions of the toothed sections and their material(s) of construction, are so described as to permit the understanding of how the said sections can be compressed whereby the gaps between the teeth at the mating ends of the said sections can undergo sufficient compression by means of an (inadequately explained/depicted) axial-loading, clamping element, while possessing sufficient resiliency to withstand the forces of the combination carriage-chair-person.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**Claims 1, 2, 28, 29, 31, 31, 33 and 34** are rejected under 35 U.S.C. 102(a) as being anticipated by Voves, et al (4,913,264).

**Re: Claim 1**, Voves discloses a stair lift (10), for at least one person, a carriage (18) mountable to a rail (12) with a track engaging drive (pinion, not shown, Col. 4, Line 15), a motor (not shown, Col. 4, Line 15), a central support post (20), a seat support post (62), an offset arm (64) being mountable to said carriage in a right side position (Fig. 3), a seat (22), and both a means for angularly securing said seat in position on

said offset arm in either left or right (Fig. 3) side position as well as selectively releasing said seat to permit the seat to swivel (106).

**Re: Claim 2**, the stair lift includes said rail and said rail includes a track portion (“...plurality of teeth (not shown) formed along the backside of the rail 12”) (Col. 4, Line 16) and a structure portion (12, Fig.1).

**Re: Claim 28**, Voves discloses, “In order to minimize the extent to which the passenger seat 22 extends outwardly from the stairway wall 14 and still provide rotation of the seat 22... the seat swivel mechanism is so arranged so as to provide a substantially constant minimum clearance between the seat 22 and the stairway wall 14...” (Col. 5, Line 43).

**Re: Claim 29**, Voves discloses one offset mount (62, Fig. 3).

**Re: Claim 31**, Voves discloses a means to angularly securing his seat in position on an offset arm, including a notched plate (64, with notches 110, 112, and 114) and his seat lock actuator (moveable cam, 108) in Figures 3 and 7.

**Re: Claim 33**, Voves discloses a manually accessible seat lock actuator (104, Fig. 2) with which “...the passenger can rotate the... seat...toward one of the ... positions.”

**Re: Claim 34**, Voves discloses the preference for “...additional switches, responsive to the rotational position of the chair... to inhibit chairlift operation when the chair 22 is rotated to a position other than the center position...” (Col. 10, Line 23).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 3 – 5 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Voves, in view of Cheney (2,507,887).

**Re: Claim 3**, though Voves discloses a structural portion as a hollow section having side channels (12), he is silent regarding carriage wheels or support rollers that ride in said channels. Cheney, however, discloses rollers (64) that ride in channels of rail means 11. Therefore, it would have been obvious to one of ordinary skill in the art to modify Voves with the teaching of Cheney in order to provide sufficient support to the carriage of Voves.

**Re: Claim 4**, again, though Voves is silent regarding carriage wheels or support rollers, Cheney discloses needle bearings (63) adjacent to said wheels. Therefore, it would have been obvious to one of ordinary skill in the art to modify the reference of Voves with the teaching of Cheney in order to provide a smoother, durable operating system for purpose of performance and marketability.

**Re: Claim 5**, Cheney discloses, "the rail means ... may be formed of one or more sections..." (Col. 1, Line 50). Therefore, it would have been obvious to one of ordinary skill in the art to provide the Voves reference with the teaching of Cheney in order to afford a practical means of installing the rail in residences, which is in keeping with the "DIY" intent of the instant invention.

**Re: Claim 45**, Cheney discloses that "...the chair is free to pivot relative to the carriage and ...is maintained in an upright position by a leveling mechanism 95". (Col. 5, Line 25). Therefore, it would have been obvious to one of ordinary skill in the art to provide the Voves reference with the teaching of Cheney in order to maintain a proper vertical orientation of the passenger during his ascent and descent along the rail.

**Claims 6 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Voves in view of Cheney as applied to claims 3-5 above, and further in view of Hoffman (2,888,099).

**Re: Claim 6**, though Voves and Cheney are silent regarding a race for electrical wiring along the rail, Hoffman teaches "... a faceplate 45... which encloses the cable" (Col. 4, Line 10 and 20). Therefore, it would have been obvious to one of ordinary skill in the art to modify the references of Voves and Cheney with the teaching of Hoffman, to provide a means to secure the cable from interfering with the travel of the carriage.

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**Re: Claim 7**, though Voves and Cheney are silent regarding the rail connectors, Hoffman teaches, "...the main rail may be ...in the preferred form, a plurality of sections ... joined in any suitable manner" (Col. 3, Line 75). Therefore, it would have been obvious to one of ordinary skill in the art to modify the references of Voves and Cheney with the teaching of Hoffman, to facilitate the handling and installation of the rail.

**Claims 8 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Voves in view of Cheney and of Hoffman, as applied to claims 6-7 above, and further in view of Bartlet (5,230,405).

**Re: Claim 8**, whereas Voves reviews the applicability of switches in general (Col. 5) and Cheney is silent on the use of switches, Hoffman teaches "... a projections (sic) mounted upon rail assembly 32..." (Col. 10, Line 28) that his limit switches (190, 188) strike when reaching the upper and lower ends of the track. Bartlet, however, furthers Hoffman through the use of a channel (124/126) for retaining a switch trip element (103). **With respect to Claim 9**, Bartlet teaches the incorporation of switches (105) mounted via "... each guide (148)" on the carriage, which, when engaged, the "... motor 170 is prevented from moving the chairlift further in that direction". (Col. 5, Line 31). Therefore, it would have been obvious to one of ordinary skill in the art to modify the references of Voves, Cheney and Hoffman, with the teaching of Bartlet, to provide a safe and functional system.

**Claims 18, 19, 35 – 41 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Voves in view of Bartlet.

**With respect to Claims 18 and 19**, though Voves does not disclose the form or type of mounting of his central support post to the carriage, Bartlet teaches a central support post (200) that is pivotally mounted at a pivot point (210) to the carriage (Fig.'s 3B and 3A). Furthermore, the seat support post (264, 262, 266) of Bartlet is attached to the central support post, which includes a fastener (206, 208, 230, Fig. 3A) with which to lock the seat support post at an angle relative to the carriage. Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosure of Voves

with the teachings of Bartlet to provide a carriage-and-chair assembly with the foresight for a variety of inclines common to residential and commercial stairways.

**Re: Claim 35**, though Voves is silent regarding contact switches to disengage the motor in the presence of an obstruction along the travel of the carriage, Bartlet teaches a limit switch (105) that when touching a bumper (103) "...or other obstruction, motor 170 is prevented from moving the chairlift further in that direction..." (Col. 5, Line 32). Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosure of Voves with the teaching of Bartlet in order to provide a further measure of safety.

**Regarding Claims 36 and 37**, though Voves is silent regarding the power source and recharging means, if any, Bartlet teaches a housing (236) for a pair of batteries (250) and a pair of contacts (107) mounted on the bumpers (103) at both ends of the rail for contact with their mating contacts (107) mounted on the guides (148) of the carriage, to charge the batteries when the carriage is at either end of the rail. Therefore, it would have been obvious to one of ordinary skill in the art to provide the invention of Voves with the teaching of Bartlet in order to insure power supply to the chairlift for disabled persons during emergencies such as power outages.

**Re: Claims 38 and 39**, again, Bartlet teaches a mount (103) with contacts (107) on either side of the rail (Fig. 7) as provision for the positive and negative terminals. Furthermore, the contacts are fixed and separated, thereby providing proper contact.

**Re: Claim 41**, mounts (103) housing the channels are held in place by screws, thereby permit trimming of the rail without compromising access to said mount (Fig. 7).

**Claims 21 – 23 and 42** are rejected under 35 U.S.C. 102(a) as being unpatentable over Voves in view of Gauger, et al (5,316,258).

**Regarding Claims 21 and 22**, though Voves discloses a rack and pinion gear drive and Cheney discloses an optional worm gear and drive (Col. 2, Line 34), the invention of Gauger discloses a worm (148) and worm gear (152) for compact installations. Furthermore, Gauger notes his worm gear is preferably formed of high strength plastic (Col. 7, Line 52), that is "...lightweight and low cost..." as well as



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"...reduces (sic) noise and vibrations as compared to the metal..." (Col. 3, Line 44).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosure of Voves with the teaching of Gauger to provide a product in keeping with a product of lightweight, durable and cost-effective materials of construction.

**Re: Claim 23**, though Gauger discloses the drive mechanisms for the adjustment of power seats, he is silent regarding the application of switches. Voves, however, teaches the incorporation and applicability of various control switches to control the motor, such as start/stop and direction of travel (Col. 10, Line 5), for purposes of ergonomics and safety.

**Re: Claim 42**, though Voves discloses a rail (12) having a hollow configuration, he is silent regarding the material of construction and the ability to trim its length. Gauger teaches, "...track 52 is in the form of an elongated... formed member which is stamped, extruded, or otherwise formed from a suitable material..." (Col. 6, Line 8), as well as the aforementioned preferable plastic materials of construction. Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosure of Voves with the teachings of Gauger in order to produce a lightweight yet durable product of contemporary manufacturing means that can be modified as needed in the field.

**Claim 43** is rejected under 35 U.S.C. 103(a) as being unpatentable over Voves in view of Gauger as applied to Claims 42, and further in view of Schaffner, et al (6,000,758).

Though Voves is silent regarding the material of construction of his rail and Gauger discloses a suitable material "...such as a high-strength, low alloy steel...", Schaffner teaches a worm gear-rack combination using dissimilar materials for smooth operation whereby the "...worm gear-rack ... being, preferably nylon... and rack being metal, preferably steel or aluminum...." (Col. 2, Line 60). Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosures of Voves and Gauger with the teachings of Schaffner to provide a material that is dissimilar to that of the worm yet is common, light weight and durable as well as in keeping with DIY marketing.

**Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Voves in view of Gauger as applied to Claims 21 - 23, and further in view of Dechantsreiter, et al (3,830,379).

Though Gauger is silent on switches in general and Voves teaches the applicability of various control switches for normal operation and safety, Voves is silent regarding the use of limit switches for slowing and stopping the chair upon reaching the ends of the rail. Dechantsreiter, however, teaches the use of limit switches (17LS, 18LS, 19LS and 20LS, Fig. 2) as a means to "...to cause the carriage motor ... to automatically slow down and then stop as the carriage approaches the extreme limits of travel in either ... direction (sic)" (Col. 10, Line 53). Though Dechantsreiter teaches only one switch for slowing the carriage in each direction, the need to incorporate a second switch for slowing has not been stated by the instant invention. Nevertheless, it would have been obvious to one of ordinary skill in the art to modify the disclosures of Gauger and Voves with the teaching of Dechantsreiter to insure a controlled deceleration and subsequent stop of a residential chair lift for disabled persons.

**Claim 44** is rejected under 35 U.S.C. 103(a) as being unpatentable over Voves in view of Schaffner, as applied to Claims 42-43, and in further view of Bartlet.

Though Voves discloses a rail for a chairlift and Schaffner discloses the materials of construction for worm gears and racks in compact installations, both are silent as to the means of securing the rail. Bartlet, however, teaches multiple feet (110) to secure the rail to the stairway. Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosures of Voves and Schaffner with the teaching of Bartlet in order to secure the chairlift system to the immediate structure.

***Allowable Subject Matter***

**Claims 10 – 16, 20, 25, and 46 - 47** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following claims contain allowable subject matter because the teachings of the prior art of record taken as a whole do not show or render obvious the combination set forth including:

**Claim 10** - track is slidably retained in said track retaining profile.

**Claim 11** - track is mounted to an upper surface of said rail (though Voves discloses a track portion as a "...plurality of teeth (not shown) formed along the backside of the rail 12") and Bartlet discloses a row of teeth (130) mounted to an upper surface of said rail (Fig. 16), the teachings of the prior art of record taken as a whole do not show or render obvious this combination).

**Claim 12** - teeth are formed into discreet track sections.

**Claim 13** - teeth are formed from molded plastic (though Gauger discloses a worm 148 preferably formed of high strength plastic).

**Claim 14** - track sections include a reinforcing element.

**Claim 15** - reinforcing element does not extend fully to the ends of each track section.

**Claim 16** - rail includes a clamping element to apply an axial load along the track.

**Claim 20** - seat support post is in the form of a forked element below said pivot point

**Claim 25** - manual motor switch to facilitate the installation on the track.

**Claim 46** - level is sized and shaped to fit on top of said seat post before said offset arm is attached.

**Claim 47** - a disposable ramp for installing the carriage

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**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bruno, et al (5,967,265) and Tremblay (5,533,594) are cited for references of self-propelled, rail-guided chairlift with battery charging system integral to the carriage and a self-propelled, rail-guided chairlift, tapping an external power source, with safety interlocks, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F, 09:00 - 18:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571.272.6951. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SHK 

13 Dec. 2005



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